

The Impact of Animation Effects on EFL Learners' Attitudes Towards Blooket: A Study in Moroccan Secondary School

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Abstract

A wide range of gamified platforms, such as Gimkit, Quizizz, Socrative, and Blooket, have been increasingly incorporated into the context of English as a Foreign Language (EFL) instruction. While numerous studies have focused generally on the positive impact of these platforms, they have not specified which game elements of these tools influence students' attitudes. Therefore, this study seeks to investigate the impact of transition effects on Moroccan secondary EFL students' attitudes towards Blooket during a vocabulary-based quizzing task. The target population was made up of two intact groups: the experimental group, which engaged in the quizzing with Blooket's animated mode, while the control (comparison) group carried out the same quizzing task with the Blooket classic mode. Using a quantitative research method, data were gathered through an attitude survey of 48 secondary school EFL students. The findings revealed that transition effects did not have a strong impact on learners' attitudes.

1. INTRODUCTION

Over the past two decades, there has been an increasing need to integrate game-based components as an essential instructional approach into educational contexts. Gamification, basically referred to as using game principles and mechanics in certain non-game environments (Deterding et al., 2011; Kapp, 2012), has been progressively employed as a useful pedagogical tool to foster learning outcomes. This strategy highly emphasizes the integration of specific gaming mechanics, such as visual effects, leading boards, points, sound effects, interactive feedback, and other multimedia features, turning conventional classrooms into learning settings of enjoyment, engagement, and productivity (Zichermann & Cunningham, 2011; Kapp, 2012, 2016).

This considerable growth in the designing and development of advanced digitized instructional tools has been nurtured by the rapid spread of mobile technologies. This breakthrough has provided useful alternatives for teachers to create more stimulating and more attractive learning environments for their learners (Hamari et al., 2014; Wang, 2015). Present-

day web-generated gamified quizzing applications sought to incorporate various audio-visual features (animations, music, and graphics), transforming traditional uninspiring classes into tension-free, amusing learning experiences. The large-scale proliferation of laptops, smartphones, iPads, and tablets has greatly encouraged companies and digital experts to design new game-like educational applications, setting the stage for an innovative perspective of the whole process of teaching, learning, and assessment. The great payoff of this change has been creating a wide range of interactive devices which bring game mechanics to learning practices, making them more appealing and meaningful (Wang, Zhu, & Sætre, 2016; Ketamo, Devlin, & Kiili, 2018).

Broadly speaking, in the English as a Foreign Language (EFL) context, there has been considerable research addressing the relevance and efficiency of adopting gamified learning tools, such as Blooket, Raptivity, Gimkit, and other similar tools (Elliott, 2015; Rahman, Hussein & Aluwi, 2015; Wang, 2015; Fotaris, Mastoras, Leinfellner, & Rosunally, 2016; Wang & Lieberoth, 2016; Wang et al., 2016; Chaiyo & Nokham, 2017). Nevertheless, investigating the impact of packed action elements and design-related effects on students' attitudes has been limited. Therefore, this study aims to address this gap, exploring the potential influence of visual components of gamified learning, precisely transition effects, which can contribute to making a different conceptual framework for the whole process of gamification.

Conducting this study in the Moroccan EFL context may be of due importance for multiple reasons. To start with, over the past twenty years, there has been a persistent call to shift the attention of educational practitioners and stakeholders towards the necessity of embracing innovative approaches that advocate the integration of game-like aspects into learning (Ait Hammou & Elfatihi, 2019). This orientation sought to breathe life and re-energize old-fashioned methods that teachers employ in EFL classes. Also, I believe that the Moroccan EFL context serves as an appropriate environment to investigate this potential correlation between learners' attitudes and the use of these applications, given the difficulty and challenges that these learners encounter in the acquisition of vocabulary, and can take advantage of these engaging tools to overcome those challenges. Added to this, Morocco has launched subsequent reforms and numerous debates that aimed to enhance the quality of education (the National Charter for Education and Training, 1999; the Emergency Plan 2009-2012 (Harrizi, 2012); and The Strategic Vision 2015-2030 (Bourqia, 2016; Chawki, 2023), all of which emphasize the integration of ICT in the teaching-learning process to upgrade the performance of both teachers and students. In this regard, several studies have been carried out to assess the efficiency of these tools (Hamdy, 2007; Naciri, 2015; Ait Hammou & Elfatihi, 2019; Mimouni & Tamer, 2020). Despite this ongoing interest in advocating these elements, deeper empirical research is

still required so as to reach a thorough understanding of how these applications can affect students and investigate what specific features are presumed to sustain their engagement. The main purpose of this research, therefore, is to examine the interdependence between animation elements and Moroccan secondary EFL learners' attitudes and engagement, especially in a vocabulary-acquisition gamified quizzing, an area that has been unexplored in technology-enhanced learning research. The paper at hand comprises five separate sections. The following section gives a comprehensive overview of relevant literature. The third section is devoted to explaining the research methodology applied in this study. The fourth section shows the research findings and some descriptive analysis, while the last section presents some implications drawn from the investigation.

2. GAMIFICATION IN EFL LEARNING

2.1.What is Gamification

Gamification has been conceptualized by different scholars, each providing a distinct perspective on both its purpose and its application. From a purpose-derived perspective, gamification is viewed as “the strategic application of game design principles, mechanics, and elements into non-game environments. It is often facilitated using digital platforms, aiming to solve problems, increase engagement, and motivate individuals towards their goals” (Christopoulos & Mystakidis,2023). There has often been a continuous debate regarding whether “gamification” and “game-based learning” refer to similar or different concepts. While some scholars distinguish between the two, others merely use them interchangeably (Deterding, Dixon, Khaled, & Nacke, 2011). Also, in game learning literature, some scholars pointed out that a distinction should be made between “serious games” and “educational games,” as they are different in purpose as well as in application. Basically, serious games cover any game-based activity that can be used beyond entertainment purposes (Dahalan et al.,2024), including the strategic implementation of these tools in various learning contexts (Dehghanzadeh et al., 2019). Essentially, these games are designed not only for creating an enjoyable learning environment, but they also aim to achieve specific mastery of a skill or foster a particular behavior.

In contrast, “educational games” are designed solely for educational purposes. (Dehghanzadeh et al., 2019). On the whole, employing gamification in educational settings has obtained grounds and recognition as an efficient pedagogical strategy, owing to its ability to enhance academic knowledge and other important skills, all at once (Hamari et al.,2014; Dichev and Dicheva,2017; Sailer et al.,2017; Bai et al.,2020)

2.2. Theoretical Grounds And Principles

The foundational principles of gamification in language learning are primarily derived from two key psychological theories: Self-Determination Theory and Flow Theory. These two theories complement each other, setting up a comprehensive framework to comprehend the motives behind human motivation. Originally introduced by Edward Deci and Richard Ryan (2000), Self-Determination Theory (SDT) has garnered considerable attention and recognition in education and learning. It specifically states that the effectiveness of gamification in educational context lies in the fact that it satisfies three significant psychological needs of learners: autonomy, learners taking the initiative and having the ownership to act; competence, which learners feel they have when they participate in games and manipulate the game tools; and relatedness, which manifests in the social bond learners sustain make with each other when they take part in a game-based activity (Ryan & Deci, 2000). The Flow Theory, on the other hand, provides the experiential framework of gamification. This theory was proposed by the Hungarian-American psychologist Mihaly Csikszentmihalyi as a breakthrough in positive psychology. In essence, the Flow Theory posits that when an individual is tempted to engage in a challenging, but manageable, task, they psychologically get into a certain state of mind, a “flow», simultaneously feeling very attracted, satisfied, exalted, and eager (Csikszentmihalyi, 1990; Nakamura & Csikszentmihalyi, 2002). When going through this case, individuals experience a moment of total immersion and deep focus on their task, resulting in good performance (Csikszentmihalyi, 1990). One determining factor for people to reach and remain in this state, or flow, is to strike the balance between the challenge or complexity of the task and the individual’s skill level. If the task is too hard, individuals easily get stuck and are therefore disappointed. Conversely, if the task is too easy, individuals feel disengaged and lose interest. The foundations outlined here present defining guidelines for game designers to tailor their game-based applications in line with this equilibrium condition and for teachers to maintain maximum engagement of their students. (Vieira & Ranchhod, 2015; Böckle, Micheel, Bick, and Novak, 2018; Bouzidi, De Nicola, Nader, and Chalal, 2019).

2.3. Empirical Evidence for Gamification

Recent research in educational psychology and educational technology has shown that integrating gamified applications into the learning environment is a significant matter. Multiple studies demonstrated the promising potential of these devices to reform students’ behavior and attitudes on various levels. First, these applications are recognized for their interactive learning environment, maintaining a vibrant and engaging learning atmosphere, which promotes collaborative learning and fosters teamworking. (Hanus & Fox, 2015). Also, multiple studies draw attention to the power of these tools to stimulate learners’ motivation, interaction, and

immersion (Alabbasi, 2017; Hanus & Fox, 2015; & Latorre-Coscolluela et al., 2025). In particular, by virtue of incorporating captivating audio-visual effects and multimedia graphics, these technologies trigger inner-driven motivation and provide tension-free, entertaining quiz experiences (Apostol et al., 2013). In the same vein, these applications are proven to develop the necessary social skills of students, instilling some social values in them, namely commitment, compassion, integrity, and a sense of belonging (Asiri, 2019; Ruben Moreno et al., 2019). Furthermore, employing these game-based strategies helps learners improve their cognitive and higher-order thinking skills (Bourke, 2019; Noroozi et al., 2020), including critical thinking, analytical reasoning, and problem-solving (Moffat et al., 2015). More importantly, adopting these innovative tools has not transformed solely students' behaviors and competences, but it has benefited teachers as well. Following the Covid-19 pandemic period, teachers at different levels of instruction have been tempted to leverage their digital competences, advancing towards more integration of technology-based elements into their lessons and, therefore, keep up with the current formats of instruction (Masry-Herzalah & Dor-Haim, 2022).

Within the EFL instruction context, adopting digital game-based strategies in teaching has proven its effectiveness. Many studies reported that adding game aspects, such as badges, bonus points, and/or leaderboards (Brigham, 2015; Majuri et al., 2018) into conventional curriculum resources assists students to learn and consolidating their skills. For example, there has been empirical evidence supporting gamification's potential to help students cope with grammar structures in EFL or ESL classes compared to traditional methods, which often fail to sustain students' interest (Castillo-Cuesta, 2020; Khalilian, Hosseini, and Ghabanchi 2021), while other studies showed that their engagement level was considerably higher (Hashim, Rafiq, and Yunus, 2019). Likewise, findings support these applications' contribution to the retention of new learnt vocabulary (Calvo-Ferrer, 2017; Guaqueta and Castro-Garces, 2018; Panmei and Waluyo, 2022). Equally, game-based learning tools have proven useful in developing learners' creative writing skills (Stanley, 2014). Moreover, following his in-depth examination of gamification in diverse EFL/ESL settings, Laksanasut (2025), emphasized gamification's significant role in boosting students' achievement in vocabulary retention, communicative fluency as well as grammatical accuracy (Laksanasut, 2025). The study was focused on three leading game platforms, specifically Classcraft, Kahoot, and Duolingo, showing that strategic utilization of these tools sustains active engagement and meaningful learning (Laksanasut, 2025).

2.4.. Gaps in Current Research

Generally speaking, gamified applications that successfully encompass some game features into learning content have proven to be of paramount importance. As indicated by the literature, when tailored to meet students' needs and inspirations, these applications can considerably contribute to students' learning and motivation. Nevertheless, there are still many unexplored areas and gaps in current research. Most studies have approached gamification elements in a holistic perspective, rather than focusing on which particular game aspects have more impact on the teaching-learning process. Although this approach generated valuable insights for a better understanding of gamification's usefulness, it lacks detailed guidance for enhancing specific design features.

Furthermore, in EFL gamified learning contexts, there is a scarcity of research focusing on visual design elements. As most studies focused on other game elements, the role and impact of animation features have not been systematically addressed. Therefore, this study aims to explore these gaps further, investigating the impact of transition effects on Moroccan secondary school students' attitudes toward Blooket in a vocabulary-based gamified quizzing.

3. METHODOLOGY

3.1.Context of the study and Participants

The study took place at El Mokhtar Soussi High School, a public school in the Provincial Directorate of Sidi Bernoussi, Casablanca-Settat Regional Academy. The target population was made up of 48 first-year Baccalaureate (K-11) science stream students, aged between 16 and 18 years old, including boys (22 participants) and girls (26 participants). The study examined the impact of animation features, specifically "transition effects", on students' attitudes toward Blooket gamified quizzing in an English as a Foreign Language (EFL) environment. The study was conducted during the spring semester of the 2024/2025 school year.

3.2.Design and Implementation of The Study

To investigate the impact of animation features on Moroccan EFL secondary school attitudes towards Blooket in a vocabulary review session, this study employed a quasi-experimental, between-subjects design, in which two conditions were compared (Fisher, 1935; Campell & Stanley, 1963; Gall, Gall, & Borg, 2003; Ruiz, Diaz, & Baeyens, 2005; Creswell, 2014). Forty-eight participants were randomly assigned to two intact groups: group 1, the experiment group, performed the vocabulary quiz using Blooket's Gold Quest mode, characterized by transition effects, including winning virtual gold when proceeding from question to question and animated sequences, such as sliding, fading, flipping, zooming, and dissolving. Group 2, the control group, engaged in the quiz through Blooket's Classical mode, which conventionally displays questions without any animation or transition effects when students move from one question to another. Thus, the way Blooket was used (with transition effects for group 1 and

without transition effects for group 2) served as the dependent variable of the study, while perceived enjoyment and perceived ease of use served as the independent variables. By perceived enjoyment (PE) is meant “the degree to which the activity of using technology is perceived to be enjoyable in its own right apart from any performance consequences that may be anticipated” (Davis, Bagozzi, & Warshaw, 1992), and by perceived ease of use we mean ‘the extent to which a person believes that using a technology will be free of effort’ (Davis, 1989). In this study, group 1 (the experiment group) and group 2 (the control group) are referred to as “animated group” vs “classic group” respectively.

3.3. Research Questions and Hypotheses

The primary purpose of this investigation is to examine the effect of animation features, specifically transition effects, on secondary school students’ attitudes toward Booklet, specifically in the EFL context. Accordingly, the central research question is:

RQ. Are the attitudes of the students who perform quizzes with transition effects significantly different from the attitudes of those who perform the same gamified quizzes without transition effects?

To address the research question, two corresponding hypotheses were proposed for this research:

H1. Students who performed gamified quizzing with transition effects will show significantly positive attitudes toward gamified quizzing as opposed to those who played the same gamified quizzes without transition effects

H2. There is no significant difference in the attitudes of students who performed gamified quizzing with transition effects and those who played the same gamified quizzes without transition effects.

3.4. Study Procedure and Data Collection

The experiment was conducted during a regular class, using the Blooket application. Both the animated group (which used Blooket with transition effects) and the classic group (which used Blooket without transition effects) participated in an identical 20-item vocabulary review, using five different question formats: 1-sentence completion (4 items), 2 -multiple choice (4 items), 3- matching words with their synonyms (4 items), 4- matching words with their antonyms (4 items), and 5-collocations (4 items). Both groups were administered the same quiz, in the same setting (classroom), during the same period of the day (morning), and using the same gamified quizzing application, Blooket. Before the quiz, the participants were taught a 1-hour vocabulary class related to the jargon of “Cultural Heritage and Values”, a unit included in their textbook (Ticket to English). The materials used during the class included worksheets, flash cards, and the whiteboard. Immediately after the class, the participants, using their smartphones, took the quiz individually. To avoid any unexpected connection-related

troubles on the part of the participants, the researcher brought a portable Wi-Fi hotspot, with relatively faster speed, to grant every participant a good connection. In order to familiarize the participants with the application's functioning procedure and how to manipulate it, the instructor offered them a 30-minute demo session, completing a 6-item grammar quiz using Blooket. This was a valuable chance for them to ask questions, remove any doubts, and get them ready for the actual quizzing experience.

Right after the quiz, all participants were asked to complete a 10-item paper-based questionnaire about their attitudes towards using the Blooket gamified quizzing platform. The questionnaire consists of two constructs, each containing 5 items. The first construct's items are meant to measure participants' perceived enjoyment (how fun, enjoyable, and amusing this gamified quizzing experience feels to them). In contrast, the items of the second construct aim to measure their perceived ease of use, PEU (how effortless using Blooket is). The participants responded to the items using a Likert 5-point scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree (Davis, 1989). The questionnaire was adapted to suit the EFL context. The researcher opted for JASP 0.18.3 software to perform descriptive statistics, summarizing the central tendencies, data consistency, and data distribution. This analysis also features principal statistical measures, namely mean, median, mode, as well as standard deviation. To measure the direction of participants' responses, skewness and kurtosis boxes were checked. The graphical representation of these data is performed using pie charts.

4. RESEARCH FINDINGS

This study investigated whether the use of animation features in technology-based gamified quizzing applications has any significant impact on EFL learners' attitudes. Therefore, two hypotheses were formulated. The first hypothesis presumes that students, using Blooket encompassing transition effects, will have positive attitudes towards this gamified quizzing platform, while the second hypothesis presumes that transition effects have no significant impact on their attitudes towards this gamified quizzing platform. The data collected from the participants about their perceived enjoyment and perceived ease of use were analyzed using JASP 0.18.3 Software, and the findings can be presented as follows:

4.1. Students' Attitudes of Blooket in terms of Perceived Enjoyment (PE)

Table (1): Mean Scores and Distribution Statistics for perceived enjoyment dimensions of Blooket by group

	PE1		PE2		PE3		PE4		PE5	
	Animated		Animated		Animated		Animated		Animated	
	Classic		Classic		Classic		Class		ic	
							ic			
Valid	24	24	24	24	24	24	24	24	24	24
Missing	0	0	0	0	0	0	0	0	0	0
Median	3.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Mean	3.458	3.583	4.125	4.042	3.958	3.750	3.917	3.750	4.083	3.917
Std. Deviation	0.658	0.776	0.741	0.690	0.751	0.737	0.776	0.847	0.504	0.717
Kurtosis	0.048	-0.015	1.756	-0.712	-1.128	0.191	0.298	-0.092	1.463	1.222
Std. Error of Kurtosis	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918
Shapiro-Wilk	0.812	0.854	0.786	0.806	0.814	0.844	0.845	0.864	0.679	0.806
Minimum	2.000	2.000	2.000	3.000	3.000	2.000	2.000	2.000	3.000	2.000
Maximum	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000

Descriptive statistics of students' perceived enjoyment show that both Blooket modes attained a high level of satisfaction. Table 1 shows that students, across both conditions, consistently demonstrated high levels of perceived enjoyment through all 5 items of the PE construct. The mean score in both animated and static groups is significantly high (exceeding 3.4), ranging between 3.458 and 4.125. However, we can notice some minor variations in the mean scores, with 4.12 as the highest in group 1 (animated group) and 3.75 as the highest in group 2 (classic group). So, the table affirms an overall consistency in students' responses, with 5 (I strongly agree) and 2 (I disagree) being the lowest and highest values on the Likert scale in groups 1 and 2, respectively. These values demonstrate that gamified quizzing tools can be a useful option when adapted to an EFL learning context. For measuring perceived enjoyment (PE), the researcher used five survey items labeled P1 through P5, representing the first survey construct.

For assessing perceived ease of use (PEU), he used 5 items labeled PEU1 through PEU5, representing the second survey construct. The following figures represent the data for each item.

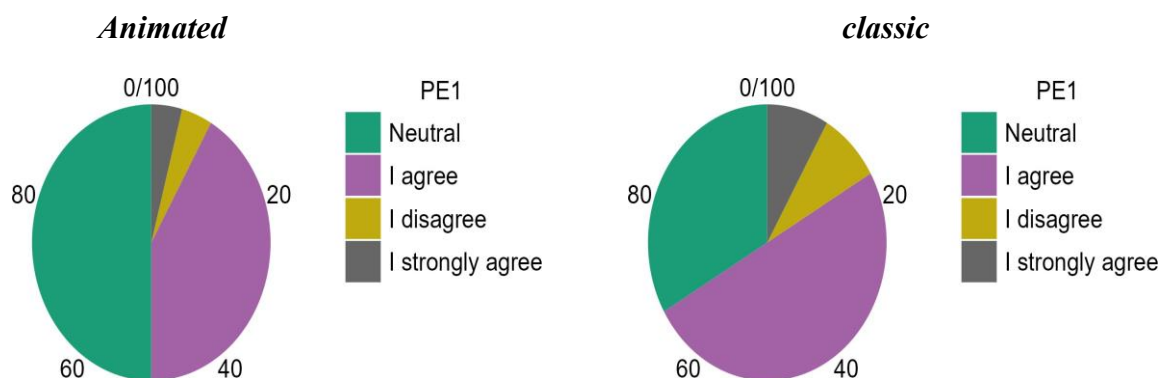


Figure 1: features P1 "I think using Blooket is enjoyable as a tool for English learning."

The examination of learners' responses displays how the Blooket platform gained a considerable degree of students' acknowledgment as an enjoyable learning and quizzing strategy. Around 60% of the students expressed their agreement, and only a few disagreed with the statement (5-10%), and a notable proportion remained neutral (30-40%). This immense consent among students, more specifically group 2 (static group), reveals the fact that the absence of background animation in gamified devices did not impede the enjoyability and entertainment of the activity.

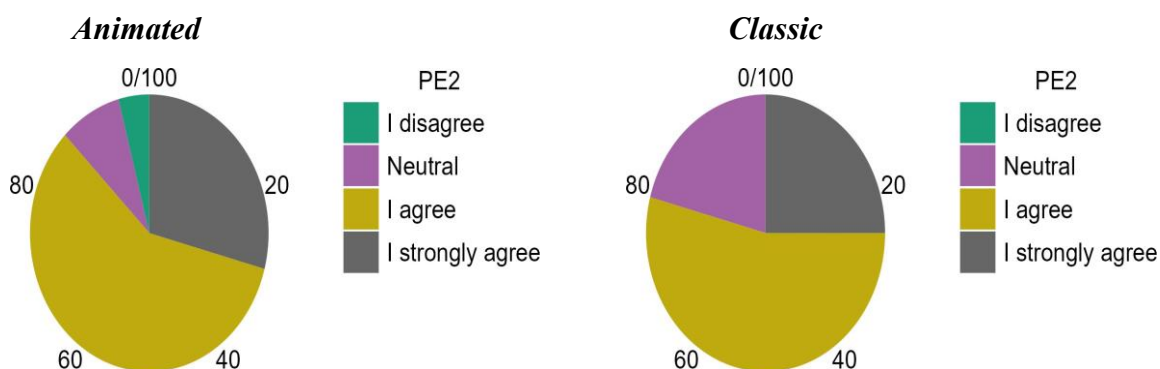


Figure 2: features P2 "Using Blooket makes learning English feel like playing a fun game rather than studying."

What I reported about the first item (EP1) is also applicable to this item. There is a general agreement among students, nearly 80%, showing the potential of Blooket to successfully turn what is often perceived to be an unattractive room into a fun, stress-free zone to enhance learning. The highest rates of agreement (approximately 60% agree, 20% strongly agree, 5% disagree, and 15% neutral) reflect a new tendency of students towards fun-like learning. Again,

this result validates the fact that even with light or no animation elements, these platforms can still trigger students' motivation to keep up with knowledge, especially in an EFL learning context.

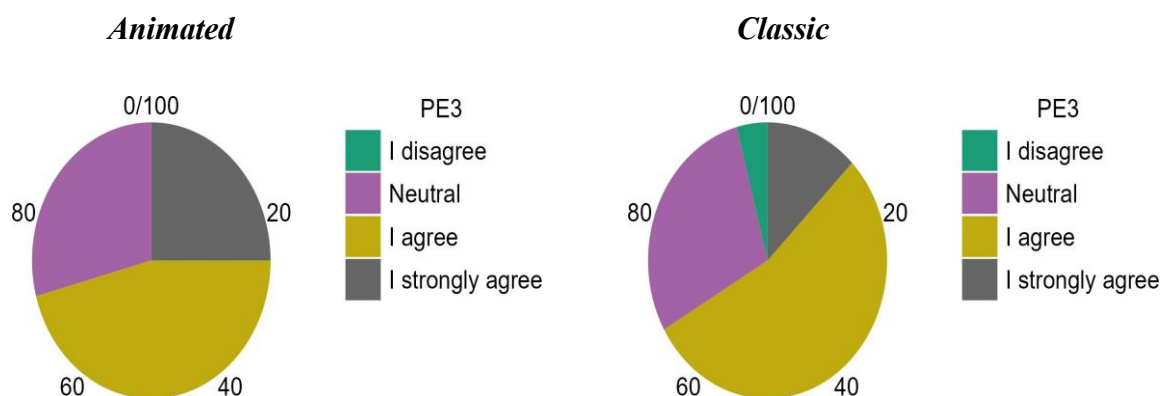
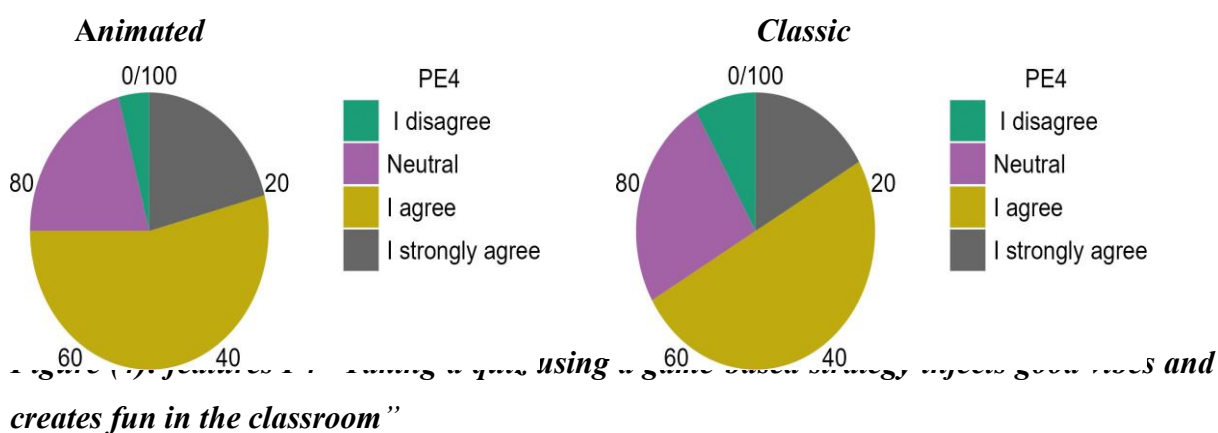


Figure 3: P3 "I feel excited and entertained when participating in Blooket activities."

This item addresses the affective aspect of integrating gamified activities into learning practice. Specifically, it aims to measure the potential of the Booklet platform to maintain the emotional engagement of learners and their readiness to contribute wholeheartedly to the success of the teaching-learning process. This is confirmed by respondents' answers. Strikingly, students belonging to group 2 (static) had even higher rates of agreement (about 67% agree, and 11 % strongly agree), compared to 46 % agreeing, and a considerable proportion (around 23%) in Group 1. In spite of some minimal disagreement on both sides, these results are significantly telling in terms of Blooket's effectiveness for hooking the interest of students and helping them cope with classroom boredom.



This item aims to investigate how taking a quiz using a technology-based tool can trigger good feelings among students and sustain their enjoyment of the competition. Results indicate a high rate of perceived enjoyment. The presence or absence of animation was not significant

in students' high perceived enjoyment (around 80 %), though 20% of the respondents remained neutral.

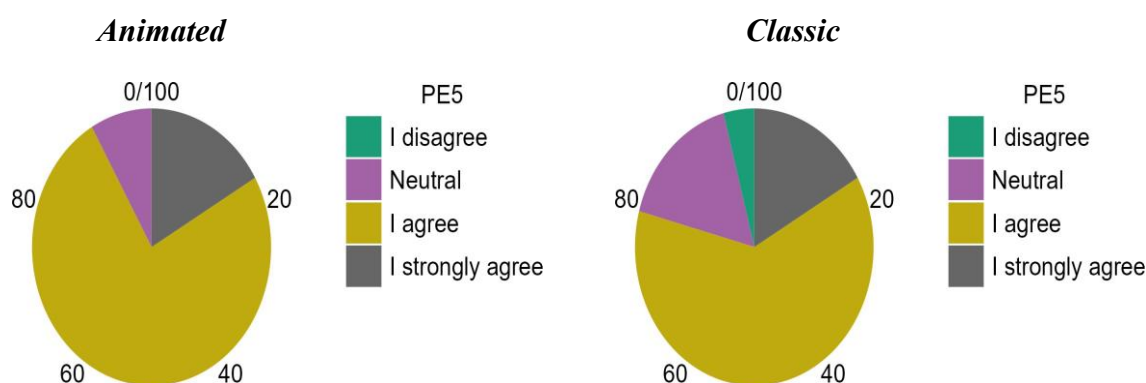


Figure (5): features P5 “I enjoy the challenge of competing with my classmates through Blooket quiz”

This last item focuses on enjoyment as it is perceived collectively by the class as a whole, capturing the impact of Blooket on the general atmosphere of the classroom. With 60% and /20% split between "Agree" and "Strongly Agree" across both conditions, participants show a higher level of perceived enjoyment, reaching about 80% of agreement. The total absence of negative responses in the animated group and minimal disagreement in the static groups clarifies a unanimous acceptance of Blooket 's potential to spark the spirit of challenge and fun.

4.2.Students' Attitudes of Blooket in terms of perceived ease of use (PEU)

This section features students' perceived ease of use of Blooket, which forms the second construct of the questionnaire. Students' perceived ease of use (PEOU) was measured through five items covering several aspects of ease of use, namely learnability (learning to operate Blooket), interface navigation, effortless completion of the quiz, understanding the platform's mechanics, and speed of task completion. The table below features descriptive statistics of the PEOU construct.

	PEU1		PEU2		PEU3		PEU4		U5	
	Animated		Animated		Animated		Animated		Animated	
	Stati		Stati		Stati		Stati		Stati	
	c		c		c		c		c	
Valid	24	24	24	24	24	24	24	24	24	24
Missing	0	0	0	0	0	0	0	0	0	0
Mode	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Median	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Mean	4.042	3.917	3.750	4.042	4.167	3.917	4.083	4.000	3.917	4.208
Std.	0.624	0.881	0.676	0.859	0.761	0.776	0.881	0.780	0.504	0.833
Deviat ion										
Skewness	-0.024	-0.662	0.346	-0.534	-0.943	-0.460	-1.005	-0.599	-0.196	-0.918
Std.	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
Error of Skewne ss										
Kurtosis	-0.112	0.142	-0.666	-0.318	1.540	0.298	0.893	0.527	1.463	0.567
Std.	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918	0.918
Error of Kurtos is										

Table (2): Mean Scores and Distribution Statistics for Perceived Ease of Use dimensions of Blooket by group

Students consistently demonstrate positive attitudes toward Blooket perceived ease of use, with mean scores ranging from 3.75 to 4.21 (SD: 0.50-0.88) on a 5-point scale. This indicates strong agreement that the platform is easy to use and functional. Both the animated group (M: 3.75-4.17, SD: 0.50-0.88) and the classic group (M: 3.92-4.21, SD: 0.78-0.88) conveyed similarly positive attitudes, exceeding the average point (3.0), with relatively low standard deviations. This consensus among EFL learners affirms that Blooket is a friendly-user and usable tool, regardless of animation features.

The statistical analysis of students' responses reveals notably higher positive perceived ease of use attitudes regarding Blooket. The mean score falls between 3.75 (SD: 0.50) and 4.21 (SD:

0.88), indicating a higher level of agreement on the ease of use of the Booklet as an *interactive platform*. Both groups perceived positively the application's OU, with the score mean being (M: 3.75-4.17, SD: 0.50-0.88) and (M: 3.92-4.21, SD: 0.78-0.88) in animated and static groups, respectively. Some of the objective usability (OU) construct items that were answered are presented below:

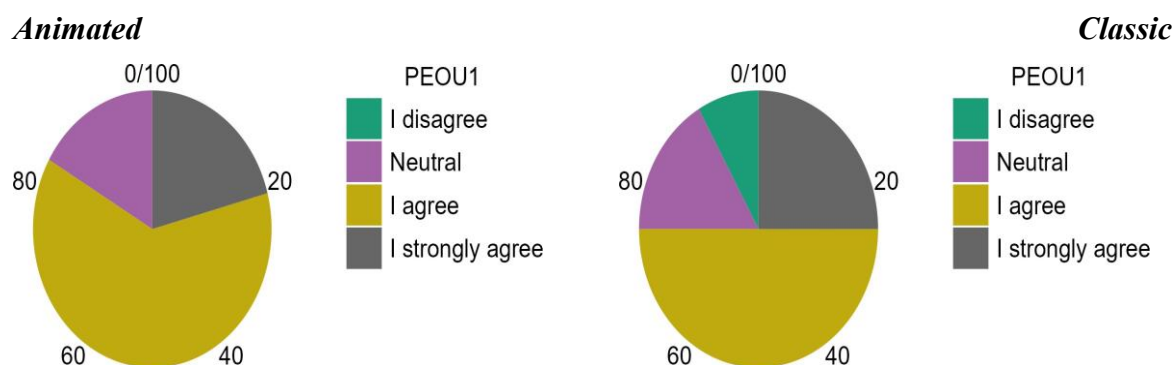


Figure (6): features PEOU1 "Blooket is easy to navigate and use during English language learning activities".

This item addresses learners' perceived user-friendliness and usability of Blooket. We can see that both groups attained a considerably high extent of usability. The weighted mean ranged between 4.0 for the animated group, with approximately 80 % of agreement, and 3.4% for the static group, whose positive answers achieved 60%. Regardless of the subtle difference in the distribution of Likert-scale assigned values, with total elimination of disagreement for the animated group versus 20% for their counterparts in the classic group, we can see that there is a certain consistency in the responses. These higher scores demonstrated the fact that students did encounter minimal technical challenges in navigating through the application's internal system, and they reflect the students' manipulation of the rules underlying Booklet as a digital response system. The same statistical pattern was maintained in the learners' evaluation of the Blooket interface, the second item of the PEU construct.

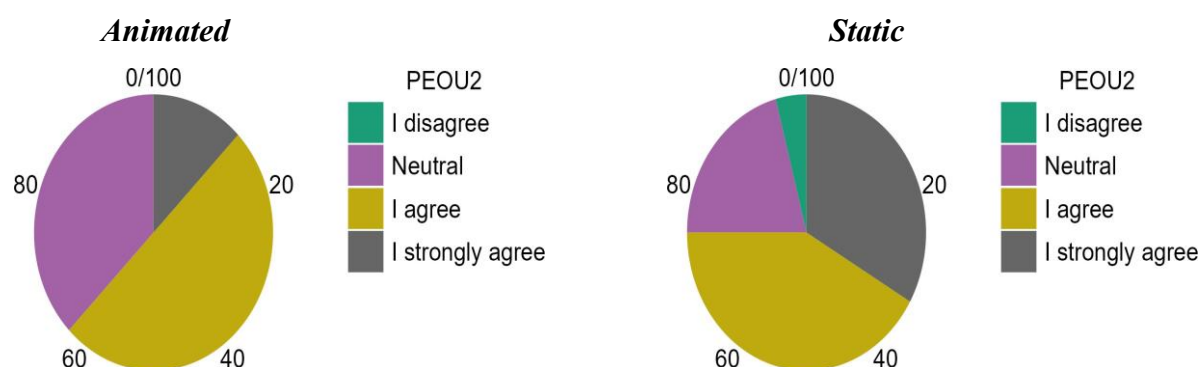


Figure (7): features PEOU2 "The interface of Blooket is clear and user-friendly for completing quizzes and activities."

In line with the previous outcomes, a comparison of the two samples regarding their perceived clarity of the platform interface displays a big convergence in the students' attitudes. The weighted mean was 4.0 for the animated group and 3.8 for the static group. So, both groups achieved a high agreement rate, irrespective of the presence or absence of animation effects. It is also worth noting that the static group demonstrated stronger agreement (40%) compared to the animated group (20%), while the neutral remained very low for both groups.

5. DISCUSSION OF THE FINDINGS

The current study investigated the effect of animation features on Moroccan EFL students' attitudes toward the Blooket gamified learning platform. Principally, the study compared attitudes of EFL students using the Blooket animated mode, with question-to-question transition effects (group 1) to those of students who used the Blooket Classic mode, without question-to-question transition effects (group 2). Participants' attitudes were measured in terms of their perceived enjoyment and their perceived ease of use. The results achieved by the researcher revealed a considerably high consistency in the learners' attitudes regarding Blooket, as a gamified instructional application. The overall majority of the respondents' answers follow a regular pattern culminating in higher levels of agreement, either in perceived enjoyment (PE) or perceived ease of use (PEU). The statistical analysis of the data gathered by means of a two-construct survey confirmed that there is no significant impact of animation features on students' attitudes towards the platform.

Generally, the outcomes of this research study align with those of multiple investigations conducted in the field of gamification and the integration of technology in EFL instruction. This alignment of the findings across studies manifests at different levels of analysis. First, regarding the positive attitudes towards incorporating game-based technologies in education, there is a unanimous agreement on the effectiveness of these applications in enhancing students' learning and on the potential of these tools to trigger intrinsic motivation. (Werbach & Hunter, 2012; Hamari, 2014; Dicheva & Dichev, 2017; Karaslan et al., 2018; Ortega-Arranz et al., 2019, and Mimouni & Tamer, 2020). Besides, concerning the effectiveness of these technologies in maintaining students' engagement, these studies, including the present investigation, affirm the necessity of adopting gamified approaches in EFL learning environments. For example, Kohnke & Moorhouse (2022) conducted a study aimed at investigating the impact of Kahoot on students, concluding that Kahoot, when operated appropriately, has great potential to maintain classroom dynamics, enhance students' engagement, and help them become autonomous learners. Equally, Bicen and Kocakoyun (2018) revealed that integrating Kahoot into preschool teaching boosted students' eagerness to perform better and encouraged them to set higher aspirations (Rojabi, Setiawan, &

Munir,2022). Furthermore, in connection with the high ratings in students' perceived ease of use toward the Blooket platform, our findings are notably consistent with an extensive body of research, supporting Blooket's user-friendliness, accessibility, and usability. Two studies, conducted respectively in Long An College of Education, Vietnam, and Malang Junior High School, Indonesia, revealed that most of the students who were surveyed about their perceptions of using Blooket in learning vocabulary perceived Blooket very positively, accentuating that the platform was easily accessible, its interface was intuitive, gave straightforward game instructions, and was easy to navigate (Thu & Dan, 2023; Sartika et al.,2023). Finally, concerning Blooket's perceived enjoyment, substantial research demonstrated a consistent pattern in the attitudes of students using Blooket for learning and assessment. In a study that aimed to evaluate students 'perceptions of Blooket as a joy-generating educational tool, Sartika et al. (2023) reported that "using Blooket can enhance students 'motivation in learning vocabulary because it makes them fun". Based on responses of 40 junior high school students who were surveyed, there was a strong agreement (about 72%) on Blooket's potential to make learning enjoyable.

In light of the results reported above, there are presumably additional key factors and variables that shape students' attitudes towards the Blooket gamified quizzing platform, aside from animation and visual effects. The remarkable convergence in students' perceptions of the functionality, practicality, and usability of this platform indicates that students are likely to interact and focus when they can understand and control the device's gaming mechanics, irrespective of their digital literacy. While animation is an inherent feature of most multimedia systems, there are other elements that attract end-users of technological devices. According to Deborah Mayhew (1999), five essential characteristics affect an interface potential to draw the attention of users (EFL learners in the context of this study), namely utility, how useful the platform is; functionality, what a system can do or offer; usability, ease of use; and persuasion, how it fosters a particular behavior (Faudzi et al.,2023). The absence of a significant impact of animation effects on students' attitudes in this study can also be explained by the foundational assumptions of some theories that emphasize the cognitive capacity limitations, hindering learners' potential to process and internalize information, especially in low-resource environments. A prominent theory that supports this proposition is Cognitive Load Theory, which posits that learners possess a narrow mental capacity distributed over intrinsic, extraneous, and schema-building processes (Sweller,1988). Therefore, embedding excessive animation effects in gamified platforms puts unnecessary cognitive pressure, impeding learners' comprehension. Aligned with this, the lack of significant animation effect is attributable to the Resource Allocation Hypothesis (Kahneman, 1973; Lang, 2000), which

emphasizes that learners in low-resource contexts prioritize practicality and utility over artistic qualities (Teo,2011; Venkatesh & Bala,2008). When burdened with excessive animations, learners' performance weakens, given their brains' limited capacity to focus on multiple tasks happening simultaneously. These theoretical frameworks unanimously indicate that animations can be neglected as they can impede cognitive processing instead of enhancing it.

The effective incorporation and implementation of gamification in Morocco's educational context faces many challenges at different levels. One substantial obstacle that impedes gamification feasibility is technological accessibility, which remains inadequate and inconsistent. With only 87% of Moroccan secondary schools being equipped with video projectors (most of which are located in big cities), most teachers find it hard to create digital learning activities for their students (Ait Hammou & Elfatihi, 2019). This inadequacy in technological infrastructure is also amplified by limited teacher training (Benhadj, El Messaoudi & Nfissi, 2019; Ait Hammou & Elfatihi, 2019). Only 50 % of pre-service teachers receive ICT training at Teacher Training Schools, and only 42 % of these teachers participate in the Generalization of Information and Communication Technologies in Education (GENIE) program, basically launched to enhance teachers' professional development in ICT (Ait Hammou & Elfatihi, 2019). Besides a lack of training, educators' competency in ICT poses an additional barrier. A considerable number of instructors possess a limited level of digital literacy, making them liable to fail in their attempt to integrate gamified elements into their instruction (Ennouari & Houssaini, 2023). Similarly, research shows that, among teachers who have some digital knowledge, the rate of those who demonstrate sophisticated skills needed for the successful implementation of gamification is below 67% (Ait Hammou & Elfatihi, 2019; Ennouari & Houssaini, 2023). This competency-based deficit is compounded by a pedagogical gap, as many teachers are unable to conceptualize how to tailor their content and lesson plans to meet gamified instruction requirements. Moroccan student teachers perceive themselves as merely average in manipulating these tools. Therefore, for these ICTs to function as real cognitive instruments for information processing and problem-solving, great effort remains to be done (Benali, Kaddouri, & Azzimani, 2018). Beyond this, other factors impeding the adoption of ICT include cultural concerns about whether games can be perceived as serious elements for meaningful learning and curriculum integration difficulties (Ennouari & Houssaini,2023). These interrelated challenges suggest that promoting gamified education in Moroccan classrooms necessitates advanced technological infrastructure and accessibility, intensified teacher training, continued professional development, alongside curriculum alignment. Ennouari & Houssaini, 2023). Considering these factors, it sounds logical that learners give precedence to usability rather than visual features (Teo, 2011; Venkatesh & Bala,

2008) when performing a gamified quiz. This explains why participants in this study prioritized Blooket's functional utility over aesthetic enhancements.

6. PRACTICAL IMPLICATIONS OF THE STUDY

These research findings and theoretical foundations outlined above collectively provide clear pedagogical guidelines for an effective integration of animation effects into gamified learning, specifically in the Moroccan EFL environment. Before embedding any animation elements, teachers should first consider the necessity and utility of these elements. The present study shows that classic modes with static visuals can be equally impactful if they are skillfully designed to meet the needs of the target population. Educators need to assess whether animation features truly support learning or simply add aesthetic embellishments without practical value. When teachers see the necessity to integrate animation, they ought to concentrate primarily on pedagogical purposes, such as enhancing comprehension, facilitating vocabulary retention, illustrating syntactic or semantic relationships, and clarifying grammar structures, rather than decorative functions. Also, instructors are advised to take into account age-related mental differences and distinct learning styles among their learners. For example, quick visual-auditory demonstrations (lasting only a few seconds) may be helpful for younger learners aged between 8 to 12 to help them retain some linguistic features, but middle and secondary school learners may perform much better using non-animated interfaces that help them maintain their cognitive resources. This minimal use of cognitive resources should help them perform more complex language tasks. Similarly, to help students save these resources, teachers can opt for other interactive elements that don't depend much on excessive animation, including drag-and-drop exercises, clickable hot spots, static arrows, highlighting, color changes, and branching question paths. These alternatives can have a similar impact on students' engagement. Furthermore, the examination of students' perceived enjoyment and perceived ease of use shows that these variables are not strongly affected by animation. Hence, teachers are called to shift their focus towards other significant aspects, such as the quality of content, clarity of objectives, and good classroom management, rather than focusing on visual and graphical design. Considering these actionable guidelines would help educators transform animation into a powerful mechanism that supports foreign language acquisition, and not a cognitive burden that merely overloads students' memory.

7. CONCLUSION

This study investigated the impact of transition effects on Moroccan EFL secondary school students' attitudes toward Blooket, a digital gamified quizzing platform. The research presumably contributes to the ongoing debate on gamification, examining the effectiveness of this approach to enhance EFL learning. Based on theoretical grounds and empirical evidence,

the study explores the potential of technological gamified applications to create more engaging, motivational, and meaningful EFL learning environments. Through the investigation of students' perceived enjoyment and perceived ease of use, the present study provides crucial insights for different stakeholders and policy makers in the field of EFL education to reconsider their frameworks and adjust their teaching practices for a better learning strategy that meets the needs of present-day students. Nevertheless, these findings should be viewed and evaluated with some degree of caution, given some limitations of the research. As clarified earlier, the target population of the study represents only a convenience sample of El Mokhtar Soussi Secondary Public School, in a given district of Casablanca city, Morocco. Although this sampling method helps in conducting the research, it does not guarantee its generalizability to all EFL secondary school learners across the entire region or the country. Students in other regions of Morocco are taught by different instructors, with different teaching practices and perceptions. Moreover, the study did not take into account the differences among the participants in their learning strategies, preferences, and their socio-cultural backgrounds. Considering such factors might generate different outputs. Correspondingly, identifying which of the characterizing features of gamified learning devices has a stronger effect on EFL learners' attitudes remains an open avenue for ongoing inquiry. I assume that enlarging the scope of research in this area, experiencing other tools and in different contexts, will presumably unveil other significant conclusions. Thus, the limitations reported above do not undermine the importance of the study; rather, they call for deeper investigation.

CONFLICT OF INTEREST STATEMENT

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